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ABSTRACT

Between July 1, 1986, and June 30, 1987, the National Occupational Information Coordinating Committee (NOICC)/State Occupational Information Coordinating Committee (SOICC) network has made significant gains in meeting the information needs of planners and administrators of vocational education and employment and training programs as well as of individuals making career decisions. There are now microcomputer-based occupational information systems in place in 38 states and territories. A new microcomputer-based occupational projections system makes it possible for individuals owning an MS-DOS microcomputer to develop state and substate supply-demand occupational projections. Two other new software enhancements to the network make it possible to identify education and training institutions and program offerings by geographic area and to retrieve data on industries that employ a certain share of workers in selected occupations. A census occupation/industry matrix file has also been developed for each state. In 29 states, occupational information is being used to plan programs at local community colleges, and 37 SOICCs report that their information is being used to plan programs for local Job Training Partnership Act service delivery areas. During the past year, SOICCs in 36 states provided training on the use and analysis of occupational information for program planning. Forty-six states now have computer-based career information delivery systems (CIDS). In the 1986 program year, these systems served 6-8 million people at approximately 15,000 sites nationwide, with almost 67 percent of the systems' users being school students. Pilot programs involving the U.S. Naval Reserve and Department of Defense were also launched during the program year. (MN)

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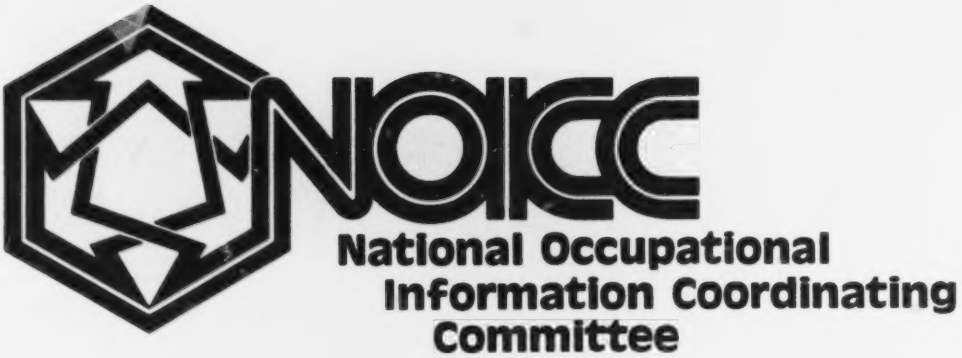

STATUS OF THE NOICC/SOICC NETWORK

June 30, 1987

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NOICC Administrative Report No. 13

December 1987

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A MESSAGE FROM

THE EXECUTIVE DIRECTOR...

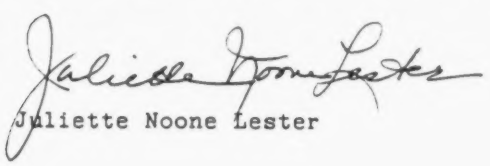
During the first ten years of the NOICC/SOICC Network, 1977 to 1987, I believe that very significant progress has occurred in the coordination and delivery of occupational and career information.

All who have participated in implementing the Congressional intent of 1976 for NOICC have a sense of pride in an "experiment" that is succeeding.

Dedicated and committed SOICC staff, however few, with scant resources, helped make this Network possible.

NOICC looks forward to the next ten years and is planning initiatives and programs to further the use of occupational and career information.

Finally, this report is dedicated to the memory of Mr. Russell B. Flanders, Executive Director of NOICC from 1978 to 1986. Mr. Flanders's sense of mission and commitment to meeting the Nation's need for occupational and career information were instrumental in making the NOICC/SOICC Network what it is today.



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Foreword

This document is the eighth annual report of the National Occupational Information Coordinating Committee (NOICC) and its network of State Occupational Information Coordinating Committees (SOICCs).

This report highlights the initiatives, activities and accomplishments of the NOICC/SOICC Network during Program Year 1986 -- July 1, 1986 to June 30, 1987. It also reports on the status of state occupational and career information delivery systems in mid-1987 and highlights some of the outstanding occupational and career information projects initiated by State Occupational Information Coordinating Committees.

Because PY 1986 marks the tenth year of the NOICC/SOICC Network, this report includes a chapter, "The NOICC/SOICC Network: An Historical Perspective," that outlines the development of the Network and the programs and projects it has initiated over the past ten years to help meet labor market and occupational information needs in vocational education, employment and training, counseling and career development.

Acknowledgments

This report was prepared for the National Occupational Information Coordinating Committee by Mary Margaret Walker, in cooperation with NOICC staff.

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THE NOICC/SOICC NETWORK: AN INTRODUCTION

The National Occupational Information Coordinating Committee (NOICC) is a Federal interagency committee that promotes the development and use of labor market information -- that is, information about education, jobs, occupations and careers. It was established by Congress in 1976 and its members include representatives from the Departments of Labor, Education, Commerce, Agriculture and Defense -- all producers and users of occupational information.

NOICC's primary mission is to improve coordination and communication among developers and users of occupational information and to help states meet the occupational information needs of planners and administrators of vocational education, and employment and training programs, as well as individuals making career decisions. This mission is accomplished through a network of State Occupational Information Coordinating Committees (SOICCs).

Like NOICC, the SOICCs are interagency committees -- their members represent state producers and users of occupational information including, vocational education agencies, vocational rehabilitation agencies, job training coordinating councils, employment security agencies and economic development agencies, among others. NOICC and the SOICCs do not collect occupational and labor market data, but rather promote and facilitate the use of data that is collected by their member agencies and other organizations.

It is the goal of the NOICC/SOICC Network to promote the development and use of occupational information, and the intergovernmental structure of the Network is an important factor in its success.

The committees encourage coordination and communication among their respective member agencies at the national and state levels. They also work together in a larger Federal/State Network and, as a result, data producers and users become more aware of each other's programs and services, requirements and needs. Information on new products and research is circulated and exchanged. Projects of mutual interest are identified and carried out cooperatively at the state and Federal levels. Successful products developed in one state are made available for others to adapt and use.

When Congress established NOICC, it specifically charged it with developing a system that would meet the occupational information and data needs of state planners of vocational education and job-related programs. In response to that mandate, NOICC developed the concept, framework and design for Occupational Information Systems (OIS), which bring together labor market and occupational data from numerous sources to better integrate the information, and format it to meet the needs of different users. The SOICCs develop, maintain and use the systems, with technical and financial support from NOICC.

OCCUPATIONAL INFORMATION SYSTEMS

An Occupational Information System (OIS) is an extensive database of labor market information along with the mechanisms for formatting and disseminating the data so that it can be used and understood by a variety of audiences. An OIS database contains data that is developed by numerous Federal and state agencies, including state employment security agencies; state vocational education and rehabilitation agencies; Job Training Partnership Act (JTPA) programs; the Bureau of Labor Statistics; the Employment and Training Administration; the Center for Education Statistics; the Department of Defense, and others.

The systems are implemented by SOICCs at the state level since that is where most economic development and employment and job-related program decisions are made. Each state system contains information on current and projected demand for the various occupations in that state as well as information about the current supply of graduates from educational and training programs.

An Occupational Information System also contains information on characteristics of occupations including occupational duties and skill requirements, tools and equipment used, working conditions, education and training requirements, licensing and certification requirements, wage and fringe benefits and occupational demographics. Occupational Information Systems also contain information about training programs and educational institutions.

From this extensive database, SOICCs, their member agencies and other experts prepare information for different purposes and groups of users.

NOICC provides financial support and technical assistance to help SOICCs compile, organize and deliver the information for two basic purposes -- designing and planning vocational education, economic development, employment- and job-related programs that meet the needs of the local and state economy and labor market; and helping individuals make informed decisions about jobs and careers.

THE NETWORK AND CAREER INFORMATION

In 1977, Congress reinforced and expanded the NOICC/SOICC role in the development and use of occupational information by involving them in helping to meet the labor market information needs of young people and adults making career decisions. Thus, NOICC and the SOICCs became involved in the development of Career Information Delivery Systems (CIDS).

CIDS are computer-based systems that provide individuals with current, accurate and locally relevant occupational and educational information -- information on civilian and military occupations and training programs and educational institutions. The data in the OIS are used to help build the CIDS database. CIDS serve as career guidance tools, helping individuals relate personal characteristics, such as interests, abilities, experience and educational goals with compatible job and career, and training opportunities.

The systems describe occupational duties, working conditions, worker requirements and employment outlook. They also describe occupational wage and salary levels and educational and training requirements. CIDS typically contain descriptions of 250 or more

occupations. Many include information on financial aid, major employers in the state and job openings listed with the state employment security agency. In addition, the systems provide information on postsecondary institutions such as admissions requirements and programs offered. Most CIDS now include military occupational and training information.

As with Occupational Information Systems, NOICC has helped fund the development and start-up of state CIDS. Within each state, SOICCs promote the use of the systems and the information in them.

State CIDS are located at some 15,000 sites nationwide, including schools, colleges, libraries, job training centers, corrections facilities, vocational rehabilitation centers and community organizations. It's estimated that the systems serve six to eight million people each year. More than half of the 46 state CIDS systems now in operation were originally developed with NOICC funding. Today NOICC is the Federal program with responsibility for assisting statewide CIDS.

In addition to supporting CIDS, the NOICC/SOICC Network is involved in a variety of other projects that promote career information for individual decision-making. NOICC conducts special training programs for labor market intermediaries -- that is, career development personnel and vocational guidance counselors, who help individuals make decisions about jobs and careers.

NOICC career-related projects also include publications and major programs that train counselors to use labor market information and promote the use of career information in the classroom. NOICC is sponsoring a national project to develop guidelines for state standards for comprehensive career guidance programs.

The SOICCs promote the use of career information through a variety of methods including CIDS training, telephone hotlines, job fairs and career information tabloids. These services and products are provided to schools, colleges, state library systems, job-training facilities and employment security agencies. The tabloids are sometimes distributed as supplements to daily or weekly newspapers. In addition, the states often conduct studies and publish reports that are publicized in the news media, identifying trends and changes in the state and local labor markets.

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THE NETWORK IN 1987

Over the past ten years, the NOICC/SOICC Network has become an effective instrument for bringing together data producers and users to help meet the nation's need for occupational and labor market information. Today the NOICC/SOICC Network extends to a large and varied universe of state and Federal agencies. But even more important, it involves a substantial community of individuals who are committed to providing high quality, timely and accurate occupational and career information to a growing number of people.

SOICCs in most states have now developed and implemented Occupational Information Systems and are concentrating on enhancing the usefulness of their systems.

Through NOICC grants, approximately 38 states have implemented the NOICC-developed Micro-OIS -- a microcomputer-based OIS system that utilizes the increased capabilities of microcomputer hardware and software. An additional seven states either have in place or are implementing mainframe computer OIS systems.

SOICCs are refining their systems and expanding applications of the OIS beyond the originally targeted user groups of vocational education and employment-related program planners and administrators to include economic development, job placement and other uses. They are providing training for new user groups and are placing the systems in employment service offices and other sites.

In addition to automated delivery of occupational information, many states publish periodic occupational supply/demand reports for state program planners and administrators, while others produce labor market information directories, drawing their information from regularly updated Occupational Information Systems.

* * *

Forty-six states now have computer-based Career Information Delivery Systems -- 26 of them implemented with NOICC funding, including five that are currently setting up their systems with start-up grants from NOICC. These systems are available at some 15,000 sites nationwide and serve six to eight million people each year.

During the 1980s, the process of connecting individuals who are making career and occupational decisions with the information they need to make informed decisions has been characterized by rapid change. Improved microcomputer technology, and the pressure of budgetary constraints have resulted in a significant movement away from mainframe computer delivery to microcomputer delivery in state-developed CIDS systems and by private vendors.

CIDS systems are increasingly available at locations that provide career development services to adults, including continuing education centers, private employers, employment service offices, rehabilitation agencies, military bases, counseling agencies, welfare offices, state correctional institutions and libraries.

During the 1970s, high school students were the primary users of CIDS systems, but by 1981, one-fourth of CIDS users were non-secondary school students. Last year, more than a third of the people who used CIDS systems were adults or college students.

In addition to computer-based CIDS systems, states continue to use a number of different methods to deliver career information to their citizens. SOICCs publish career information tabloids and directories of licensed occupations and apprenticeship programs. SOICCs sponsor career and job fairs and operate telephone hotlines that provide information about occupations and careers in their states.

Clearly, the systems supported and operated by the NOICC/SOICC Network increasingly are being used to deliver current and accurate occupational and training information to those providing planning, employment and career development services for the workforce of today and tomorrow -- as well as to individuals making decisions about their occupations and careers.

* * *

MICRO-OIS

The Micro-OIS is an excellent example of how the NOICC/SOICC Network continually works to refine and improve its systems. While the Network's original efforts in implementing Occupational Information Systems focused on mainframe computerized systems, the rapid advance in the capabilities of microcomputer hardware and software led NOICC to develop a microcomputer-based OIS system, called the Micro-OIS. As mentioned previously, approximately 38 states have now implemented the Micro-OIS.

Micro-OIS Enhancements. This past year, NOICC and the National Crosswalk Service Center developed two new software enhancements for the Micro-OIS -- the Training (School) Directory and the Occupation/Industry Matrix module. While these modules are designed to operate as an integrated part of the Micro-OIS, they also can be run as stand-alone modules.

The Training or School Directory is designed to identify education and training institutions and their program offerings, by geographic area. Among the potential users are staff of JTPA service delivery areas (SDAs), employers and persons working in economic development. For example, SDA staff may contract out training for JTPA clients to nearby institutions that offer appropriate programs. The information in this module will assist in that process and in the general coordination of vocational education programs with JTPA, as mandated in their respective Federal legislation. Employers can use it to identify institutions that may be able to help them with employee retraining, or customized training on new equipment or processes. Economic development staff can use it to demonstrate the capacity to train workers in the skills required by a firm that is considering locating in a specific area.

To meet the needs of different types of users, data in the Training Directory can be sorted in a number of ways. For example, the module can produce a list of schools in the state or selected geographic areas; a list of all schools in a specified area that offer selected training programs; or a listing of the programs offered by specified institutions. The information can be accessed in a variety of ways including appropriate program codes, by geographical area, type of institution or by program title.

The Occupation/Industry Matrix module provides data on the industries that employ a certain share of workers in selected occupations, specified by supply/demand cluster code or occupational code. Where the information is available, the module can display the names of major employers within industries, for the state or selected sub-state area.

The information in this module is useful in a variety of tasks, including job development, job placement and economic development. For example, it can be used to locate on-the-job training and cooperative education positions. It can be used to find jobs for

program completers. It can aid dislocated workers by identifying the industries and firms that employ people with the same occupational skills. It may even be useful to employers to identify possible supplier firms, or to identify a market for companies that primarily sell to other firms, rather than directly to consumers.

Micro-OIS Review. This past year, NOICC reviewed the various state Micro-OIS systems to identify features that states have introduced to the original Micro-OIS. The National Crosswalk Service Center reviewed each state Micro-OIS to analyze the features available in order to determine whether the system is working properly, and to get a general idea of how the systems are being used.

Summaries of each system were prepared and the information is being used to identify new state-added features/modules that may be of interest to other states and to identify problems that need to be addressed to improve operation of the system.

NOICC is also using the information from the review to determine whether it will consider developing an entirely new dBASE III or dBASE III Plus version of the Micro-OIS that incorporates the best features of the various state systems.

NOICC and the Crosswalk Center also developed a 'benchmark test' that was used by states to check their Micro-OIS systems to see whether they were working properly, and if not, to identify the problems. Because each state version has some differences from other state versions, the test provided only a framework for reviewing the systems. NOICC plans to work with SOICCs in PY 1987 and 1988 to more fully assess the actual use of the Micro-OIS in supporting planning decisions.

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MICROCOMPUTER MATRIX OCCUPATIONAL PROJECTIONS SYSTEM

This past year, NOICC announced the availability of a microcomputer-based MATRIX Occupational Projections System. With this system, states can develop state and sub-state supply/demand projections on an MS-DOS microcomputer. It is expected that over half of the states will adopt the system in the first year of its release.

The Microcomputer MATRIX Occupational Projections System was developed by the Occupational Projections Service Center of the Utah Department of Employment Security, with major funding provided by NOICC under a contract with the Interstate Conference of Employment Security Agencies (ICESA).

The system uses Occupational Employment Statistics (OES) program survey data and independently derived industry projections to project detailed occupational employment and openings. It operates on IBM PC-compatible microcomputers and is written in dBASE III Plus. The microcomputer-based system provides an alternative to mainframe computer systems, which are often costly and in some states more difficult to access because of competing priorities for processing and programming time and support.

The system is primarily intended for use by State Employment Security Agencies, which are usually responsible for producing state and local occupational projections. The system will allow them to produce and revise projections in-house rather than relying on external data-processing facilities.

Perhaps one of the most significant improvements of the microcomputer-based MATRIX system over the old mainframe processing system is that it allows users to review and edit the data as it is being processed. In addition, the system can create estimates of self--employed and unpaid family workers. It also allows the use of Census data in those cases where no OES survey data are available.

Because the new system is written in dBASE III Plus and operates on IBM PC-compatible computers, output from the system can easily be input into the Micro-OIS. It was reviewed and tested by each of the sponsoring agencies and design assistance was provided by Bureau of Labor Statistics staff.

***

TECHNICAL CONFERENCES: DEVELOPING INDUSTRY/OCCUPATIONAL PROJECTIONS

NOICC, along with the National Governors' Association (NGA) and the Interstate Conference of Employment Security Agencies (ICESA), sponsored three national Industry/Occupational Employment Projections Training Conferences in 1986 and early 1987 for state employees responsible for developing state and sub-state industry and occupational employment projections. These conferences were attended by more than 130 participants from 48 states.

NOICC, NGA and ICESA also produced a handbook for developing industry and occupational projections that was used in the training conferences and can serve as a reference handbook for use in each state.

***

NATIONAL CROSSWALK SERVICE CENTER

Demand for Crosswalk Service Center products and services was up substantially this past year from levels of the previous two years, with a significant increase in demand for microcomputer-based products.

As noted previously, the Crosswalk Service Center has been involved in a number of major projects with NOICC this past year, including the development of the Micro-OIS School Directory and Occupation/Industry modules; the review of various Micro-OIS systems; and the development of the 'benchmark' test used by states to check their Micro-OIS systems.

The Crosswalk Center also developed a Census Occupation/Industry Matrix file for each state and worked with the Bureau of Labor Statistics and the state of Utah in developing the specifications for the files. Thirty-five states are now using the Census Occupation/Industry Matrix files developed for them by the Crosswalk Center.

This past year, the Center also began updating the CIP codes and the NOICC Master Crosswalk. It's estimated that the new Crosswalk will be completed by the end of calendar year 1987.

PROJECTS WITH THE MILITARY

Military Occupational and Training Data. During the past year, the National Crosswalk Service Center has customized the 1987 Military Occupational and Training Data (MOTD) by including related state CIDS titles. States provide the Center with a listing of their civilian CIDS titles and the Center matches these titles with the MOTD titles and codes. Also during the past year, the Crosswalk Center implemented a new delivery system for Military Occupational and Training Data -- the information is now available on diskettes for use with microcomputers.

Naval Reserve Project. The U.S. Naval Reserve and NOICC have launched a pilot project to develop IBM PC-compatible microcomputer software that would provide the Naval Reserve with flexible access to information on existing civilian training programs that might be used to address the needs of the Reserve.

This information would be used by training officers to contact local institutions and, as appropriate, contract for civilian training services. NOICC is developing the system software using the same database programming language used in the Micro-OIS.

In this project, NOICC is developing a Civilian Training Inventory (CIVTRAIN) that will provide four types of basic reports for Naval Reserve training officers, including: schools that offer training related to selected Reserve occupations; schools that offer training for selected civilian instructional areas; training programs at selected schools; and lists of schools in selected geographic areas. The data can be accessed by Reserve occupation, civilian program, civilian school or geographic area.

CIVTRAIN utilizes elements from two key crosswalk files -- the Military-Civilian Occupational Crosscode (DoD) and the NOICC Master Crosswalk.

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SOICC OIS ACTIVITIES

As noted previously, Occupational Information Systems are actually implemented by SOICCs at the state level, since that's where most job and employment-related program planning decisions are made.

This past year, a total of 38 states had microcomputer-based OIS systems in place and seven were using interactive mainframe computer OIS systems.

Thirty-nine SOICCs report that occupational information from their OIS systems is used in some formal way to develop local plans for vocational education schools. In 29 states, occupational information is used for planning programs at local community colleges. Thirty-seven SOICCs report that their OIS information is used to plan programs for local JTPA service delivery areas.

According to the SOICC Directory, SOICCs in 46 states use secondary school completers as a source of information on worker supply for their OIS. SOICCs in 47 states include information about public junior or community colleges in their OIS and 31 include information on four-year higher education and professional degree-granting institutions.

SOICCs in 25 states use information on apprenticeship programs in their OIS; 29 use information on JTPA programs; 26 use Job Corps information; and 14 use information on vocational rehabilitation programs.

Other types of data are commonly included in the systems. Thirty-nine states display data on job service applicants and openings. Thirty-six states provide some sort of wage data. Almost half of the states now include narrative outlook or analysis statements to support interpretation of the numerical data.

Fifteen SOICCs have incorporated some type of school/program directory file into their OIS and six have added an industry/employer directory.

Thirty-six SOICCs produce occupational/labor market data for substate areas, including JTPA service delivery areas; MSAs/LMAs; and educational planning regions. In PY 1986, SOICCs in 36 states provided user training on the use and analysis of occupational information for program planning.

More than 80 percent (44) of all SOICCs published a variety of labor market and occupational information reports for use by program planners in PY 1986. Examples of SOICC-produced labor market/occupational information publications include Information Age: Occupational and Data Trends, Arizona SOICC; A Longitudinal Analysis of Employment and Plant Counts for Connecticut Manufacturing, Connecticut SOICC; and Delaware Labor Market Information Directory, Delaware SOICC.

The Florida SOICC published Occupational Information for Program Planning, while the Idaho SOICC produced Occupations in Idaho.

Other SOICC publications include, Labor Market Information: A Community College Planning Guide, Illinois SOICC; Nevada Occupational Information System Labor Supply and Demand, Nevada SOICC; and Occupations Licensed and Certified by New York State, New York SOICC.

Other SOICC-produced publications include Directory of Labor Market and Occupational Information, North Dakota SOICC; Licensed, Certified and Registered Occupations in Oklahoma, Oklahoma SOICC; Directory of Occupational and Educational Information Sources, Oregon SOICC; Occupational Panorama, Puerto Rico SOICC; South Dakota Occupational Outlook Handbook, South Dakota SOICC; Directory of Labor Market, Career and Occupational Information, Vermont SOICC; Apprenticeship Occupations in Virginia, Virginia SOICC; and OIS Strategy, Washington State, Washington SOICC.

MAJOR CAREER INFORMATION INITIATIVES & PROJECTS: 1987

CAREER INFORMATION DELIVERY SYSTEMS

The need for reliable occupational and educational information by individuals making decisions about careers has grown significantly in the past few years. This increasing need is prompted in part by dramatic changes in the American labor market such as demographic shifts, the impact of foreign competition and technological advances. The NOICC/SOICC Network continues its work in supporting, updating and refining Career Information Delivery Systems to help address these needs.

In 1987, NOICC provided second-year funding to five states -- Kentucky, Mississippi, Nevada, Pennsylvania and West Virginia -- for the development and implementation of statewide CIDS. Once these systems are in operation, a total of 46 states and territories will be using statewide Career Information Delivery Systems to connect youth and adults making career or occupational decisions with the information they need to make informed choices.

Also in 1987, NOICC issued an RFP for a third round of grants to provide assistance to integrate military information from the Military Occupational and Training Data into Career Information Delivery Systems. These DoD funded grants continue the cooperative effort between NOICC and DoD on improving the availability and use of military career information. Since 1983, 14 grants for the integration and use of the MOTD data have been funded.

IMPROVE CAREER DECISION MAKING PROGRAM

The goal of the Improve Career Decision Making (ICDM) Program is to train both inservice and preservice counselors to help individuals make career decisions based on an improved understanding of the labor market.

In PY 1986, 21 states conducted ICDM inservice training. A total of 2,696 counselors were trained at the 157 training sessions provided by the 21 SOICCs. The PY 1986 ICDM inservice program was funded from Carl Perkins Vocational Education Act supplemental funds provided through NOICC's Basic Assistance Grants to the SOICCs.

SOICCs that participate in the program conduct two to three-day workshops covering 28 competencies. The workshops are conducted by teams of counselor educators, SOICC staff, career information delivery system representatives and state research and analysis staff. Next year, the ICDM inservice program curriculum will be completely revised and modeled on the textbook, Using Labor Market Information for Career Exploration and Decision Making: A Resource Guide.

The ICDM preservice program led to the publication of the "Resource Guide" in 1986. A companion training handbook was produced by Eastern Illinois University through a NOICC grant to the Illinois SOICC in the Fall of 1986.

NOICC awarded a grant to the American Association for Counseling and Development (AACD) for a series of workshops to promote the use of the new textbook and training handbook in counselor education programs at colleges and universities across the country.

An AACD cadre of six ICDM-experienced counselor educators conducted 12 one-day regional workshops throughout the U.S. in 1986-87, which were attended by 243 people -- 46-percent of whom were counselor educators. The rest were counselors.

NOICC and AACD plan to conduct 12 more workshops in 1987-88, three of which will be scheduled at the regional conferences of the American Association for Counselor Education and Supervision.

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NATIONAL CAREER DEVELOPMENT GUIDELINES

In response to the need for national guidelines and standards for quality career guidance programs at all educational levels, NOICC launched a major, two-phase project for the development and implementation of national guidelines for career guidance and counseling programs in 1987. The North Dakota Occupational Information Coordinating Committee is implementing the project, under a $237,000 grant from NOICC.

The first phase of the project consists of establishing guidelines for standards including a comprehensive list of desired student/client outcomes; an outline of activities necessary to meet the outcomes; and competencies that counselors need in order to be able to deliver the program.

The second phase involves the development of implementation materials and a field test of the guidelines and implementation materials in four states. In the fall of 1987, four states will be awarded grants of $25,000 each to pilot the use of the guidelines and implementation materials at all five educational levels. The four demonstration models will serve as case studies in using the products and will be included with the appropriate level products when they are published in the fall of 1988.

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DISTRIBUTION OF CIDS AUDIO-VISUALS

In 1986, NOICC and other members of the Audiovisual CIDS Enhancements (ACE) Consortium established a distribution center at Kansas State University to promote, market and distribute ACE Consortium products to the public. In the spring of 1987, the ACE Distribution Service began a marketing campaign for the "Kaleidoscope of Careers" videotapes including the distribution of a free demonstration set to each SOICC and a mass mailing to state guidance supervisors.

Many SOICCs decided to serve as distribution centers for their state's school systems and obtained volume discounts for statewide orders of one hundred or more sets of 'Kaleidoscope.' A similar campaign is planned for "Picking Your Path," in the Fall of 1987.

ACE products are also exhibited at many major professional association conferences.

NOICC and the ACE Consortium plan to continue working with the National Aeronautics and Space Administration and the National Science Foundation regarding the possibility of producing two new videotape products. The first is a videotape for use with CIDS systems using star talent to motivate children in grades four through six to choose science, math and foreign language courses in planning for high school. The second is a "Kaleidoscope of Science and Technology Careers" -- a sixth videotape in the "Kaleidoscope of Careers" series that focuses on careers in science and technology.

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MILITARY CAREER PATHS

During PY 1986, NOICC served as the "civilian" representative on a DoD project that traces typical career paths of 38 military enlisted and officer occupations for a publication to be distributed to high schools and colleges.

Military Career Paths, to be published in 1988, describes the work performed at selected stages of a 20-year military career. From the perspective of an entire career, it describes advancement, training and possible duty assignments.

It also describes the actual career progression of an individual in the illustrated occupation. The profiles are part of each career path description, which also includes information on the various entry and promotion points and the qualification requirements for certain occupations in the career path, along with a diagram of a typical career progression including branches for various related specialty careers.

Also scheduled for national distribution next year is the 1988-89 Military Career Guide.

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SOICCS, CIDS & CAREER INFORMATION ACTIVITIES

The number of CIDS sites in the U.S. totaled 15,000 in PY 1986. Seventy-four percent were located at schools -- kindergarten through secondary levels; more than 7 percent were located at post-secondary institutions and almost 10 percent were located at state employment and training agencies.

Almost 67 percent of CIDS users in PY 1986 were school students (kindergarten through 12th grade). However 23.7 percent of CIDS users in PY 1986 were at community colleges, four-year colleges or universities, and 7.7 percent of CIDS users accessed the systems through their state's employment and training agencies.

SOICCs and state agencies that operate CIDS are continually developing special system features that address the needs of the citizens of their states.

Some of the special CIDS features currently in operation or under development include graduate school files, Connecticut SOICC; financial/scholarship and employer files, Florida CIDS; entrepreneurship file, Nevada; and job bank file for the handicapped, New Jersey SOICC.

Ohio's CIDS has an information file about the world of work, resumes and interview techniques; the South Carolina SOICC's system includes current job listings from

the state job service agency. Rhode Island's business and industry file will be complete and updated in 1987.

The Ohio CIDS is also piloting a career education file for teachers and career counselors and is identifying adult education programs in the state. The Minnesota system is developing an information file for displaced homemakers and the New Hampshire SOICC is developing entrepreneur and high school planner files. In Pennsylvania, the SOICC is developing a transferable skills assessment system and has already added an inventory of Pennsylvania postsecondary institutions that offer training in specific occupational areas.

Maine is involved in a special research project to test the use of CIDS software in a variety of settings. Currently, seven rural, isolated schools are participating in the project and participants have attended a three-day training workshop to learn how to use the system and software.

CIDS usually have an interagency advisory group active in setting system policy. Nationwide, 61 percent of CIDS system advisory or governing boards include representatives from colleges or universities; 55 percent have representatives from the field of economic development; 40.7 percent include individuals from the private sector; and more than 70 percent have representatives from JTPA programs.

To promote the use of career information this past year, 23 states published career tabloids and 28 sponsored job or career fairs. Ten states operated career information hot-lines for the citizens of their states and eight published 'helpful hints' guidebooks for jobseekers.

In addition to career information tabloids, publications related to career information produced or sponsored by SOICCs this past year include, for example, The Job Finder, Alabama SOICC; Jobs in American Samoa's Health Industry, American Samoa SOICC; Job Hunter's Guide to Arkansas, Arkansas SOICC; and Schools Offering Occupational and Career Training Programs, Kentucky SOICC.

The Massachusetts SOICC produced High Technology Careers in Massachusetts and the Montana SOICC published Montana Apprenticeable Occupations.

Other SOICC-sponsored publications include New Mexico Job Hunter's Guide, New Mexico SOICC; Getting Started: North Carolina Jobs and Careers, North Carolina SOICC; ABC of the World of Work, Puerto Rico SOICC; and Utah's Career Guide, Utah SOICC.

NOICC COMMUNICATION & COORDINATION

PUBLIC INFORMATION PROGRAM

This past year, NOICC developed and began implementing a public information program designed to inform targeted audiences of NOICC activities, programs and projects.

As part of that effort, the Executive Director and NOICC staff have been meeting with representatives of key organizations and conducting briefings on NOICC programs and goals. These organizations include the National Governors' Association, the American Vocational Association, the American Association for Counseling & Development, the Association of Computer-Based Systems for Career Information, the Interstate Conference of Employment Security Agencies, the State Higher Education Executive Officers, the National Career Development Association and the National Association of State Directors of Vocational Education, among others. NOICC's Executive Director and other staff have also given major presentations at national conferences.

In addition, NOICC has hosted representatives of a number of foreign countries that have expressed interest in the NOICC/SOICC organizational structure as well as its programs, products and systems. NOICC's Executive Director has made presentations about the Network at several international conferences on occupational and career information and NOICC has participated in regional career development and related conferences in Maine and Wisconsin. There is also a growing involvement by NOICC staff in SOICC meetings and conferences around the country.

NOICC's Executive Director and several staff members have written articles on NOICC projects and areas of concern that have been published in a variety of journals and newsletters, including the Vocational Education Journal, the Journal of Career Development, AACD's Guidepost, International Association of Personnel in Employment Security's Perspective, the National Career Development Association Newsletter, and others.

Press releases announcing the launching or progress of major NOICC projects are now sent out on a regular basis and news stories on NOICC projects and activities have appeared in USA Today, Education Daily, Employment and Training Reporter, Vocational Training News, NGA Labor Notes, JTPA Update, AVA Guidance Division Newsletter, ACSCI Newsletter, the Oregonian, and others.

A special workshop on public and media relations was held for SOICC directors at the NOICC/SOICC Conference in Portland, Oregon, and NOICC publications have been listed in the Chronicle Career Index, a resource for career counselors.

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ELECTRONIC TELECOMMUNICATIONS NETWORK

NOICC's Electronic Telecommunications Network (ETN) is increasingly being used by SOICCs -- with about half of all SOICCs using the network for communications by the end of PY 1986. ETN runs on the ADVOCNET telecommunications network, which is sponsored by the National

Center for Research in Vocational Education and links hundreds of vocational educators throughout the United States.

Currently, NOICC Administrative and Information Memoranda are transmitted to SOICCs via ETN as well as through the mail and most major NOICC projects also use ETN to speed communications.

Future uses of ETN may include communication with other systems; bulletin boards; survey completion and tabulation; and database transmission.

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NOICC/SOICC CONFERENCE

Since 1978, NOICC has sponsored a yearly conference to promote the exchange of ideas and information among the National and state committees and staff. The Tenth Annual National SOICC Conference was hosted by the Oregon SOICC and was held in Portland in July 1987. The conference was held in conjunction with the annual meetings of the Interstate Conference of Employment Security Agencies LMI Directors and the National Association of State Career Development Guidance Supervisors.

"The Challenge of Change," was the conference theme and sessions featured the proposed NOICC Long Range Plan; Public Relations Strategies for SOICCs; Financing Strategies for SOICCs; and NOICC's Electronic Telecommunications Network. For the first time, NOICC's Technical Steering Group held an open meeting at the conference.

There were also sessions on the use of data by vocational education and JTPA personnel; the newly developed Microcomputer MATRIX Occupational Projections System; career information and at-risk populations; and the use of data by economic development professionals.

The conference closed with a speech from NOICC Executive Director Juliette Noone Lester, "Planning for and Managing Change: New Demands, New Directions."

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APPRENTICESHIP CONFERENCE

NOICC, the Bureau of Apprenticeship Training, the Office of Vocational and Adult Education and the Illinois SOICC began to plan a conference to promote the exchange of information on apprenticeship and occupational data.

The conference provides a forum for discussing the use of apprenticeship and occupational data, data needs of the apprenticeship community and the availability of current apprenticeship data. Scheduled for November 1987 in Chicago, the conference also serves as a prototype for additional regional apprenticeship conferences.

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NEXT STEPS

Over the next decade and a half, new and changing technology, growing international competition and demographic shifts will create major changes in the American labor market.

Technological changes and international competition are already causing significant declines in employment in certain industries, while employment in high technology and service-related industries is increasing dramatically.

Demographic changes in the American population are also having an impact on the economy and labor force and, as a consequence, there is a strong likelihood of increasing mismatches between the capabilities of the population and the skills required in the workplace.

Labor market, occupational and career information can serve as key tools in identifying and implementing strategies and programs designed to address these and other economic issues.

NOICC and the SOICCs offer some of the best resources to address the labor market and occupational information needs that will arise between now and the year 2000. To effectively address these new and emerging information requirements, the Network plans to take an aggressive, pro-active stance in exploiting the use of occupational information.

NOICC LONG-RANGE PLAN

NOICC and the SOICCs are working on a long-range plan that is identifying new directions for the Network. The plan is expected to be finalized by early 1988 and will be revised annually in response to changing conditions, as appropriate. The plan represents an effort by the NOICC/SOICC Network to outline strategies and activities for meeting the changing occupational information needs of the economy as well as individuals in the labor market. The NOICC five year plan consists of two major thrusts, one addressing the improvement of existing programs and systems and the second focusing on efforts that respond to critical needs.

Specific activities that may be considered include the development of dissemination strategies, beginning with an assessment of current OIS usage and the development of guidelines for user training and marketing of the OIS to better meet state and local planning needs.

Within the context of a five-year plan, the Network is considering a new training program on applications of the OIS including the development of resource materials and training on the application of OIS in JTPA and vocational education planning. Training materials and train-the-trainers sessions could be offered for in-state training, using ICDM as a model.

The proposed five-year plan also considers the development of new enhancements for the Micro-OIS, possibly including new modules that could be added to existing versions of the Micro-OIS and/or part of a new dBASE III prototype system if one is developed. Modules under consideration could include industry analysis, graphics routines and demographic information reports.

The proposed five-year plan also contemplates the development of a Micro-OIS maintenance manual that

provides guidelines on maintaining the Micro-OIS and techniques for using dBASE III Plus to support system maintenance. The plan also contemplates the establishment of formal Micro-OIS user groups that could provide assistance to members on system maintenance and use.

Also under consideration are ways to improve wage data and occupational projections capabilities. Activities could include a study and report on wage data; the development of a guidebook outlining best practices in compiling wage data; and continuing efforts with the Employment Standards Administration to develop improved wage data on construction trade occupations.

The plan considers the development of improvements to the Microcomputer MATRIX Projections System, including confidentiality screening and the incorporation of new national projections information.

Another effort under consideration is the establishment of a national center to support the Microcomputer MATRIX Projection System -- to add new national data files and incorporate changes in occupational and industrial classifications and other data items related to the occupational projections process.

The Network is considering what it can do to improve programs to assist dislocated workers and other at-risk populations. Activities that could be undertaken include identifying and analyzing data required for different methods of transferable skills assessment, including the DOT database; identifying model efforts to serve dislocated workers; and the development of systems for use by human resource programs for matching workers with alternative occupations and/or industries. NOICC could also develop and implement a training program on services and activities that can improve the use of CIDS by dislocated workers for use at national or regional conferences.

The proposed five-year plan considers the development of prototype microcomputer-based information systems to serve economic development planning needs.

System development could be patterned after the approach used in developing the Micro-OIS and would include occupational information and other major information elements used in economic development.

Also under consideration are possible projects to improve CIDS systems including support for improved databases and the use of the systems to provide better access to career information for adults. Specific activities might include the use of aptitude test results in CIDS systems which would involve identifying current CIDS testing practices; obtaining the reporting structures of aptitude test developers and developing the methodology for relating tests to CIDS.

To improve CIDS databases, NOICC could provide technical assistance on the availability of national school file information; identify CIDS information topics that are subject to change and revision; and identify CIDS information topics of major interest to users. Training modules on maintaining and improving CIDS databases could then be developed and implemented at national and regional conferences.

The plan outlines a project that could help provide better adult access to career information including the development of a resource guide on the use of CIDS by adults. The guide would document adult career information needs and CIDS services and activities.

NOICC may also explore developing and implementing a training program for use at national and regional workshops on services and activities that can increase adult use of CIDS systems.

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THE NOICC/SOICC NETWORK: AN HISTORICAL PERSPECTIVE

In 1977, there were no precedents for organizing one Federal and 57 state interagency committees to work together on the development and delivery of occupational information. Thus, NOICC's first major task -- and its first major achievement -- was establishing a Federal/State Network, with SOICCs operating in all of the states and territories.

Once the Network was in place, one of NOICC's initial tasks was to set up a systematic way to take occupational data from a variety of sources and format it so that it could be used to plan vocational education and employment-related programs that meet the needs of individuals and the economy.

At that time, relatively little had been done to examine the relationships between existing data sources or their potential relevance to vocational program planning. There was no framework for defining what information was needed to accomplish this -- and no system for organizing the available data to meet this need. NOICC and the SOICCs were given the responsibility of designing and implementing such a system.

Subsequent legislation broadened NOICC's mandates to include the provision of career information for youth and adults. This led to NOICC's involvement in supporting the implementation and enhancement of Career Information Delivery Systems (CIDS) in the states.

This section outlines NOICC/SOICC activities in developing, implementing and refining information delivery systems and traces some of the major steps and accomplishments achieved by the Network in meeting its mandate to address the occupational information and data needs of program planners and individuals making career decisions.

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DEVELOPING & REFINING THE OIS

NOICC and the SOICCs played very different roles in producing a workable Occupational Information System. In general, NOICC defined the basic concepts for the system, established the national guidelines and provided funding to the states for the development and implementation of the systems. The SOICCs developed individual systems and types of delivery geared to state and local needs.

OIS DEVELOPMENT & IMPLEMENTATION

Publications. NOICC developed a number of key documents to establish the basic parameters of an OIS and the procedures for interfacing occupational demand and specific components of occupational supply. The first, A Framework for Developing an OIS, was published in 1978. This document represented the first effort by NOICC to define the basic concepts and components of an OIS.

It presented the basic parameters of an OIS and provided the core on which states could build.

By January 1981, NOICC had developed and published a two-volume handbook to help SOICCs develop and implement an Occupational Information System. The first volume, OIS Handbook - Occupational Information Development describes the basic sources of occupational, educational and related characteristics data that are needed for an OIS. The second volume, OIS Handbook - Occupational Information Analysis, Presentation, and Delivery was the first major resource ever that provided detailed technical assistance in the compilation and analysis of occupational information within the context of an OIS.

Training. In 1980 and 81, NOICC held two regional sessions to introduce states to the OIS Handbook and its application. In 1982, NOICC and the Office of Vocational and Adult Education (U.S. Department of Education) sponsored three regional training sessions for state vocational education personnel on the use of occupational information in planning vocational education programs.

Since 1983, NOICC has sponsored three national OIS Technical Conferences. These conferences served as a major forum for addressing key issues in maintaining and delivering occupational information in a systematic and useful way. The third and largest conference was held in January 1986 in Kansas City, Missouri.

Conference topics included an overview of the OES projections process; evaluation of past industry and occupational projections; employer surveys; and other issues concerning occupational supply and demand data and information delivery and use. More than 135 participants from 52 states and territories attended the conference. Two pre-conference workshops offered a review of the basic concepts of an OIS and training in the maintenance of state systems using OIS microcomputer-based software (Micro-OIS).

NOICC MASTER CROSSWALK

To facilitate the use of existing sources of occupational information, NOICC funded the development of a special cross-coding instrument called the Crosswalk, which is now known as the NOICC Master Crosswalk. A computerized database, the Crosswalk shows relationships among the major occupational and educational classification systems used by the Federal government. Through the Crosswalk, data classified according to one of these different classification systems can be compared with data from one or all of the other systems.

THE VPO

Publications. Building on previous efforts to cross-reference occupational and education data, NOICC began working on the Crosswalk in 1979 in an effort to match vocational education programs with related occupations for publication in a reference manual called Vocational Preparation and Occupations -- commonly known as the VPO. The VPO explained the classifications in the Crosswalk, provided technical references to facilitate their use and presented extensive tables with information from the Crosswalk organized by vocational program.

Training. In 1983, with the release of the third edition of the VPO, NOICC, the Office of Vocational and Adult Education and the National Center for Education Statistics (U.S. Department of Education) sponsored one national and four regional training sessions for state vocational education personnel on the use of the VPO. NOICC also developed a VPO training package that was made available to states that preferred to offer their own VPO training to state and local personnel.

Today, the VPO is no longer in print as a single document, but has been replaced by National Crosswalk Service Center reports.

NATIONAL CROSSWALK SERVICE CENTER

In 1983, NOICC established the National Crosswalk Service Center within the Iowa State Occupational Information Coordinating Committee to update and manage the Crosswalk and provide technical assistance in its use. The Crosswalk is used as a technical tool in developing and maintaining state Occupational Information Systems and Career Information Delivery Systems.

Since the Center was established, its products and services have expanded considerably. It provides special reports custom-designed for individuals or organizations; technical assistance in the use of the NOICC Master Crosswalk and classification systems; and copies of data tapes, print tapes and data on microcomputer diskettes.

The Center maintains the computerized SOC Career Profiles database, which provide guidance-based descriptions of working conditions for the 832 SOC coded and titled occupations. The Center also serves as a depository of computerized occupational and educational information resources, including current and former NOICC Master Crosswalks; Bureau of Labor Statistics Crosswalks; Occupational Employment Statistics Matrices; Dictionary of Occupational Titles and Standard Occupational Classification Manuals; and Occupational Employment Statistics Survey Dictionaries.

Specific Crosswalk Service Center products include NOICC Master Crosswalks on tape or on diskettes for use on MS-DOS microcomputers; standard runs based on the NOICC Master Crosswalk; the SOC Career Profiles data tape or SOC Career Profiles on diskettes for use with MS-DOS microcomputers.

The National Crosswalk Service Center has also been working with the Department of Defense in relating military and occupational specialties to civilian occupational and training programs.

DEVELOPING UNITS OF ANALYSIS

Information that relates employment demand to the supply of qualified workers in an occupation is very useful in evaluating opportunities for employment and training, and the NOICC/SOICC Network has made a unique contribution in this area.

Using the Crosswalk, the NOICC/SOICC Network formulated procedures for relating occupational supply data from educational and training institutions to data on employment demand in related occupations in clusters or groupings called units of analysis. This helps states group or cluster occupational demand with vocational education and other training data in their Occupational Information Systems. Units of analysis are

actually developed by the states -- not NOICC. This provides flexibility to the states in best meeting their needs.

Publications. In 1982, NOICC issued a comprehensive Guide to Forming Units of Analysis, a technical manual specifically designed to aid states in clustering occupational demand with vocational education and other training data in an OIS. Since then, NOICC has provided on-site technical assistance in developing units of analysis appropriate to specific states.

Drawing on this experience, NOICC has worked with the Departments of Education and Labor to develop national prototypes that provide a starting point for defining state-specific units. The prototypes are on computer diskettes and can be modified for individual states, thus expediting the preparation of similar data clusters.

In 1984, NOICC issued the Guide to Using the National Units of Analysis, which explains the procedure for adapting the prototypes for a state Occupational Information System. In 1985, the New Occupational Employment Statistics (OES) codes were incorporated into the national prototypes and in 1986, NOICC added the new CIP codes to the national prototypes. NOICC continues to offer technical assistance to individual states and to work with the Departments of Education and Labor to keep the national units of analysis up-to-date.

Training. NOICC staff conducted units of analysis and VPO training sessions at six different sites in 1983, to assist states in interfacing supply and demand data for an OIS.

NOICC/NGA OIS PROJECTS

In 1982, NOICC launched a major effort with the National Governors' Association for the development and implementation of OIS systems that would provide occupational information to administrators and planners of employment and vocational education training programs. Eleven states received OIS technical assistance grants to adopt existing computer-based OIS systems.

The idea behind the project was to build on computerized OIS systems developed in some states and make them available to other interested states.

As part of the OIS implementation effort with NGA, in 1984, NOICC also sponsored the preparation of An Introduction to Using an Occupational Information System: A Reference for Program Planning, which provides an introduction to the use of occupational information in planning vocational education and employment and training programs. It provides a review of fundamental labor market concepts and data sources and offers sample cases that demonstrate the application of information from an OIS in program planning.

In 1984, NOICC and the Employment and Training Administration funded a project with NGA to develop material and training for planners of JTPA (Job Training Partnership Act) programs. Using Labor Market and Occupational Information in Human Resource Program Planning, published in 1985, was a result of this effort. In October of that year, NOICC, NGA, ETA, ICESA and the Bureau of Labor Statistics sponsored a

national conference in Miami, Florida, to help states develop their own training programs using the new LMI training package.

NGA has since combined the first two volumes of the training package and an annotated bibliography into a 300-page textbook for participants in state training sessions. It is called Cracking the Labor Market for Human Resource Planning and is available from NGA.

THE MICRO-OIS

Because of the rapid increase in the capabilities of microcomputer hardware and software, in 1983, NOICC developed a microcomputer-based OIS referred to as the Micro-OIS. This interactive system provides data in a cluster-based format and also has the capability to allow users to search for occupations or training programs that meet certain criteria, such as employment size, entry wages, growth rates, or job placement rates. Thus the system consists of two components: an interactive structured search component to access the supply-demand clusters, and a report generating component for preparing supply/demand displays.

The Micro-OIS is cost-effective and relatively easy to update and maintain. It offers the advantages of computerized delivery to local jurisdictions without the expense of long-distance telephone charges involved in on-line computer use. It can be used to produce supply/demand publications for statewide or selected substate area distribution. The interactive access routine enables planners to request specific data directly or through a structured search.

NOICC has established an active technical assistance program to help states maintain their systems and has designated the National Crosswalk Service Center as the repository for various state versions of the Micro-OIS. The Center analyzes each version and alerts the Network to unique features that may be of interest to other states. In addition, Center staff work with NOICC to identify potential Micro-OIS enhancements.

ENLARGING THE DATABASE

The Military. In 1985-86, NOICC worked with the Department of Defense to furnish SOICCs with data on people leaving the military services, providing an additional source of data on the supply of trained workers for inclusion in states's Occupational Information Systems. The information includes nine-digit DOT and military occupational specialty data by state, all counties and the four military services. It will be updated and issued annually.

Job Corps. In another effort to help states reduce gaps in information on occupational training supply, NOICC arranged for the SOICCs to receive data on trainees completing Job Corps programs. Each SOICC now receives a special tabulation prepared annually by the Job Corps that provides information on trainees returning to their states. In PY 1985, data were presented by CIP program code for the first time.

Apprenticeship. In PY 1985, NOICC and the Bureau of Apprenticeship and Training (BAT) began working together to improve coordination between state and regional apprenticeship bureaus and SOICCs. BAT is establishing apprenticeship

management systems that are a potential source of training supply data for the states. State apprenticeship bureaus are also potential users of state occupational and career information systems.

ENHANCING THE DATABASE

Improving Projections. Over the years, NOICC and the SOICCs have participated in a number of projects to improve the OIS database. They have contributed funds or services to help member agencies maintain or enhance important data collection programs, such as the Occupational Employment Statistics (OES) program.

In 1985, NOICC and the Interstate Conference of Employment Security Agencies (ICESA) launched an effort to develop an exportable microcomputer matrix system for developing state occupational employment projections. The Utah Occupational Projections Service Center developed the system and the package was released by NOICC in 1987.

In PY 1985, NOICC and the National Crosswalk Service Center developed state occupation-specific labor force separation rates and distributed them to the states. The new rates are based on unpublished 1980 decennial Census data and working life tables prepared by the Bureau of Labor Statistics from Current Population Survey data.

Updated for the first time since the mid-70s, the separation rates are used to develop estimates of job openings that are a result of replacement needs by each state.

Filling in the Gaps. In 1982, NOICC awarded a grant to the Iowa SOICC to prepare a guide for collecting employment data for agriculture and agribusiness. The guide outlines procedures similar to those used in the OES program, which does not collect information on the agricultural sector.

States have had a longstanding concern about the lack of information on the employment outlook for planning at the local labor market level. In response, in 1984, NOICC sponsored the development by the Utah SOICC of computer software to help states produce estimates of occupational employment for sub-state areas. The estimating methods it employs were developed by the New Jersey Department of Labor and Industry, using related research in Texas, Colorado, Oregon and Utah. Called OASIS, the system is used to generate sub-state estimates from statewide OES survey data files.

In PY 1985, NOICC continued to address a major gap in OIS occupational characteristics data -- the lack of wage and salary information. With funding from the Employment Standards Administration, NOICC supported efforts to collect wage data on occupations in the construction industry. These data, which meet ESA needs in administering the Davis-Bacon Act, were released to NOICC and made available to the states in 1986. Although the surveys covered relatively few occupations, the data were developed for sub-state areas in each state and should provide useful information for an OIS.

Encouraging Standardization. The NOICC Master Crosswalk is just one means of addressing the problems stemming from the use of different classification systems. NOICC has also encouraged efforts of Federal agencies to move toward greater standardization among the systems. NOICC supported the 1980

revision of the Standard Occupational Classification (SOC) and the Department of Education's effort to replace two classification systems with a single Classification of Instructional Programs (CIP). The OES program of the Bureau of Labor Statistics and the Census are now using occupational classifications based on the 1980 SOC. NOICC also developed materials and training programs to help states use the 1980 SOC and CIP.

THE OIS AND PROGRAM PLANNING

Careful analysis of the data in a state's Occupational Information System can help identify major changes and trends in local, state and regional labor markets. Information developed from the data in an Occupational Information System can identify current and potential shortages of workers in specific occupations in specific geographic areas.

With this kind of information, planners and administrators of vocational education and job-training programs, for example, can make informed decisions about whether to offer or discontinue a particular program in a particular community. The data also can help identify potential trouble spots in the performance of programs.

Although the data in the Occupational Information System are used primarily by planners of vocational education and job training programs, they have many other applications. OIS data can provide local governments trying to attract new businesses with up-to-date information about current and projected employment, the supply of skilled workers and education and training programs.

Businesses considering locating in a particular area can obtain localized information about the supply of skilled workers and the availability of education or training programs.

The data in an OIS can help service providers planning programs to help people on welfare, dislocated workers or unemployed youth identify job opportunities in the local and state labor market. An OIS can help vocational rehabilitation counselors match possible occupations with the job skills of individuals who may have become physically handicapped.

It is NOICC's goal to increase the use of OIS by program planners, researchers and others and to this end it conducts and sponsors training programs and publishes materials to assist users in learning to use the systems.

THE OIS AND CIDS

Although Occupational Information Systems for program planners were virtually nonexistent when NOICC was established, a number of states and private vendors had already developed Career Information Delivery Systems, many of which were initiated through grants from the Department of Labor in the 1970s.

Today, much of the information in Career Information Delivery Systems (CIDS) is drawn from the data in each state's Occupational Information System.

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NOICC, SOICCs AND CAREER INFORMATION

Individuals who are exploring career options, making plans for related education or training, changing careers, or seeking employment, need reliable occupational and educational information.

In 1977, NOICC and the SOICCs were asked by Congress to help meet the labor market information needs of youth and adults. In response, the NOICC/SOICC Network has helped provide career information to millions of Americans nationwide.

The Network uses a variety of methods for coordinating and delivering career information, but perhaps its most important effort is in connection with Career Information Delivery Systems (CIDS).

CAREER INFORMATION DELIVERY SYSTEMS

The NOICC Career Information Delivery System (CIDS) program is based upon a Department of Labor demonstration program initiated in 1974 that supported the development of career information systems -- nine states participated in the DOL program.

Five years later, NOICC assumed the Federal-level responsibility for CIDS and in 1980 and 81, it provided start-up funding to 21 SOICCs for the development and implementation of CIDS in their states. An additional five SOICCs were provided funding by NOICC in 1986 and 1987 for CIDS development. Forty-six states now have or are implementing SOICC-recognized computer-based CIDS -- 26 developed with NOICC funding.

In addition to financial support, NOICC provides technical assistance and training in the use of the systems -- and it also fosters CIDS development by providing opportunities for the exchange of information, ideas and expertise among system developers and users.

THE ACE CONSORTIUM

In 1984, NOICC began funding audiovisual enhancements of CIDS systems, which combine computerized career information with audiovisual capabilities. The computers allow structured searching of career information databases by various criteria. The program provides both printed information and audiovisual displays on selected occupations by linking the computer and a videotape player. The Colorado, North Carolina and South Carolina SOICCs collaborated with NOICC on the project and formed the ACE Consortium.

Their work has generated video footage, occupational information narratives and software that have been used in a number of products. One is an interactive videotape system that uses an Apple II microcomputer linked to a commercial videotape player to provide narrative audio and visual information on about 200 occupations. Several audiovisual products intended for use with elementary through junior high school students have also been developed, including the "Kaleidoscope of Careers" and "Picking Your Path."

CAREER INFORMATION WORKSHOPS AND CONFERENCES

NOICC's mandate to give special attention to the labor market information needs of youth and adults has been translated into programs serving individuals directly, such as CIDS systems,

and also into programs that aid the labor market intermediaries who assist individuals -- career, guidance and employment counselors.

In cooperation with other organizations, NOICC has sponsored three national career information conferences and five major workshops. A session in 1984 was the first ever national invitational conference on career information delivery and use. It was an initial step in bringing together national representatives of the professional communities concerned with career information development and delivery and guidance counseling.

A year later, more than 100 individuals from 48 states and territories attended the second annual Career Information Conference. Hosted by the Georgia SOICC, it was held in Atlanta, Georgia, prior to the annual convention of the American Vocational Association. Twelve professional guidance and counseling associations and other organizations joined NOICC as sponsors of the conference.

IMPROVE CAREER DECISION MAKING

One of NOICC's major programs aimed at helping counselors improve their knowledge and use of career and labor market information in career counseling is the "Improve Career Decision Making Program" (ICDM).

Since 1981, almost 17,000 counselors in 54 states and territories have received in-service training through the ICDM Program.

The original ICDM project was designed and developed by the Labor Market Information Division of the Employment and Training Administration (ETA) in 1979 and 1980, with the assistance of NOICC. At that time, most counselors in schools, colleges, Job Service offices, vocational rehabilitation and other counseling settings had little or no knowledge of the availability and potential for the use of occupational, career and labor market information for career counseling.

ICDM was designed to address that problem by providing training workshops for practicing counselors to upgrade their capabilities in using labor market and occupational information in career counseling. Funding for the program was provided by ETA, NOICC and the Department of Defense.

The ICDM inservice program has proved to be a very popular and enduring mechanism for SOICCs to reach the counseling community and provide information about what labor market information products are available in their states.

The success of the inservice ICDM training led to recognition of a similar need for such training for pre-professional counselors which in turn led to a second ICDM effort -- a project to train pre-service counselors.

Funded by the Department of Defense, the project has produced curriculum materials for educators to use in college and university counseling courses. The project also resulted in the publication of a textbook, Using Labor Market Information in Career Exploration and Decision Making: A Resource Guide and a companion training handbook. The guide is designed as a primary or supplementary text for a college course in career development for counselors in training. It can also be used as a reference guide for teachers and counselors or as a resource in professional

development workshops or seminars. The Resource Guide links career development theory, labor market concepts, occupational information resources, career counseling practices and professional development plans.

NOICC sponsored a series of regional workshops for counselor educators in using the Resource Guide to improve the knowledge and use of occupational, career and labor market information by counselors-in-training. The seminars, held in PY 1986, were conducted by the American Association for Counseling and Development (AACD), under a NOICC grant.

Another ICDM project, sponsored by NOICC and the Rehabilitation Services Administration, produced an ICDM curriculum designed for rehabilitation counselors. The project was conducted by the University of Northern Colorado. It also resulted in the ICDM Program Training Manual, which was introduced to trainers from the Regional Rehabilitation Continuing Education Programs in the spring of 1984, to be used in courses at their institutions.

CAREER INFORMATION IN THE CLASSROOM

NOICC's efforts to promote the delivery and use of career and labor market information for career decision making have also included a project aimed at classroom teachers. NOICC and the U.S. Department of Education's Office of Career Education entered into a cooperative project in 1981 to train teachers how to infuse concepts and information from the Occupational Outlook Handbook into kindergarten through 12th grade classrooms.

The final product, Career Information in the Classroom: Workshop Guide for Infusing the Occupational Outlook Handbook, is a training package in the form of an instructor's outline covering 28 competencies in six modules.

NOICC/DoD AND MILITARY CAREER INFORMATION

NOICC and the Department of Defense have been working together since 1979 to improve the linkage between military and civilian occupational information. In 1982, DoD initiated the Military-Civilian Occupational Crosscode project, which resulted in the development of a database linking 4,000 military occupations with related civilian occupations. The NOICC/SOICC Network has served in an advisory capacity for the development of two career information resources based on the crosscode project.

One resource is a data tape, "Military Occupational and Training Data," (MOTD), which provides composite, cross-service military occupational and training narrative and coded information in a form useful for integration into Career Information Delivery Systems. The MOTD is designed for use by developers of CIDS and other career information resources.

The MOTD contains narrative and coded data on military occupational and training specialties. Occupational titles are based on the Standard Occupational Classification three or four digit unit groups and joint-service, composite information is provided for 134 enlisted and 76 officer occupational areas. The MOTD is available from the Defense Manpower Data Center in both computer tape and print formats.

With funding from the Department of Defense, NOICC awarded grants in 1984 and 1985 for integrating MOTD into computerized CIDS systems in 32 states. The integration efforts of these states were evaluated in a research project monitored by the Oregon SOICC. Information from the evaluation is reflected in the updated MOTD, released in June 1986.

A second career counseling resource developed by DoD in 1984 was the Military Career Guide: Employment and Training Opportunities in the Military, a compendium of information on enlisted occupations and training.

Designed for students to use in exploring military careers, it was distributed in May 1985 to more than 19,500 secondary and postsecondary schools and to recruiting stations nationwide. It was developed with the assistance from three major work groups, including a civilian task group organized by NOICC.

In response to requests from counselors and educators, information currently is being developed on officer occupations and will be included in the 1988-89 edition of the Guide.

NATIONAL CAREER DEVELOPMENT GUIDELINES

In PY 1986, NOICC launched a major, three-year project to develop national guidelines and implementation materials for comprehensive career development programs at all educational levels, including elementary, middle school, secondary, postsecondary and adult.

Counseling professionals from across the country -- from state agencies, community colleges and universities as well as elementary and secondary schools -- are participating in the development of the guidelines. Representatives from national, state and local educational and community agencies are also involved.

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FINANCIAL REPORT

NOICC's operations and grant programs are funded by the U.S. Department of Labor and the U.S. Department of Education. In Program Year 1986 -- July 1, 1986 to June 30, 1987 -- NOICC received $3,037,000 from the Department of Labor ($2.871 million in basic funding and $166,000 from the Employment Standards Administration for a special project) and $2,201,000 from the Department of Education. The Department of Defense provided $1,042,000 for NOICC/DoD projects in PY 1986.

NOICC grants are awarded on the basis of program priorities as well as need and availability of funds. NOICC supports state activities through two major grants programs:

1. Basic Assistance Grants (BAGs), which support SOICC operations, staff leadership, OIS implementation and training and other activites covered by the Job Training Partnership Act (JTPA) of 1982 and the Carl D. Perkins Vocational Education Act of 1984.

2. Special Purpose Grants, which support specific projects that address NOICC's national priorities. Special Purpose Grants are used primarily for developmental research; technical assistance in implementing OIS or CIDS systems; and special training efforts such as the Improve Career Decision Making (ICDM) Program. The majority of these grants are awarded on a competitive basis.

NOICC grants accounted for 50.5 percent of SOICC funding in PY 1986, for a total of $6.6 million (this figure includes some efforts funded in late PY '85, but primarily implemented in PY '86), with BAG grants amounting to $5.16 million and special purpose grants totaling $1.4 million.

The balance of SOICC funding came from JTPA funds, 11.6 percent; state appropriated funds, 10.0 percent; PVEA funds, 7.8 percent; and employment service monies, 2.9 percent. Just over 17 percent of SOICC funding came from a variety of sources including CIDS user fees, economic development agencies and vocational rehabilitation agencies, among others.

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SOURCES OF FUNDING: NOICC

	1981	1982	1983	1984	1984	1985	1986
DOL	5095	3070	3169	2727	3168	3157	3037
Ed.	3100	2243	2158	2243	2243	3500	2201
DoD		1057	290	1600	1250	1265	1042
TOTAL	8195	6370	5617	6570	6661	7922	6280

NOICC EXPENDITURES

STATE ACTIVITIES	1981	1982	1983	1984	1984	1985	1986
SOICC BAGs	6483	4845	4400	3187	4234	4182	5160
CIDS	2612	788	457	1377	779	143	220
ICDM	159	381	174	371	15	196	90
OIS Coord./ Comm.	391	344	482	405	545	121	147
Spec. Network Support						1066	1117
TOTAL	9645	6358	5513	5340	5573	5708	6734
% of Total Expenditures	87.3	87.9	80.8	86.1	83.7	89.2	88.9
FEDERAL ACTIVITIES							
Technical Assistance	872	325	623	220	467	10	85
NOICC Operations	527	551	687	645	620	680	753
TOTAL	1399	876	1310	865	1087	690	838
% of Total Expenditures	12.7	12.1	19.2	13.9	16.3	10.8	11.1
TOTAL NOICC EXPENDITURES	11044	7234	6823	6205	6660	6398	7572

NOICC GRANTS FOR STATE ACTIVITIES: PROGRAM YEAR 1986

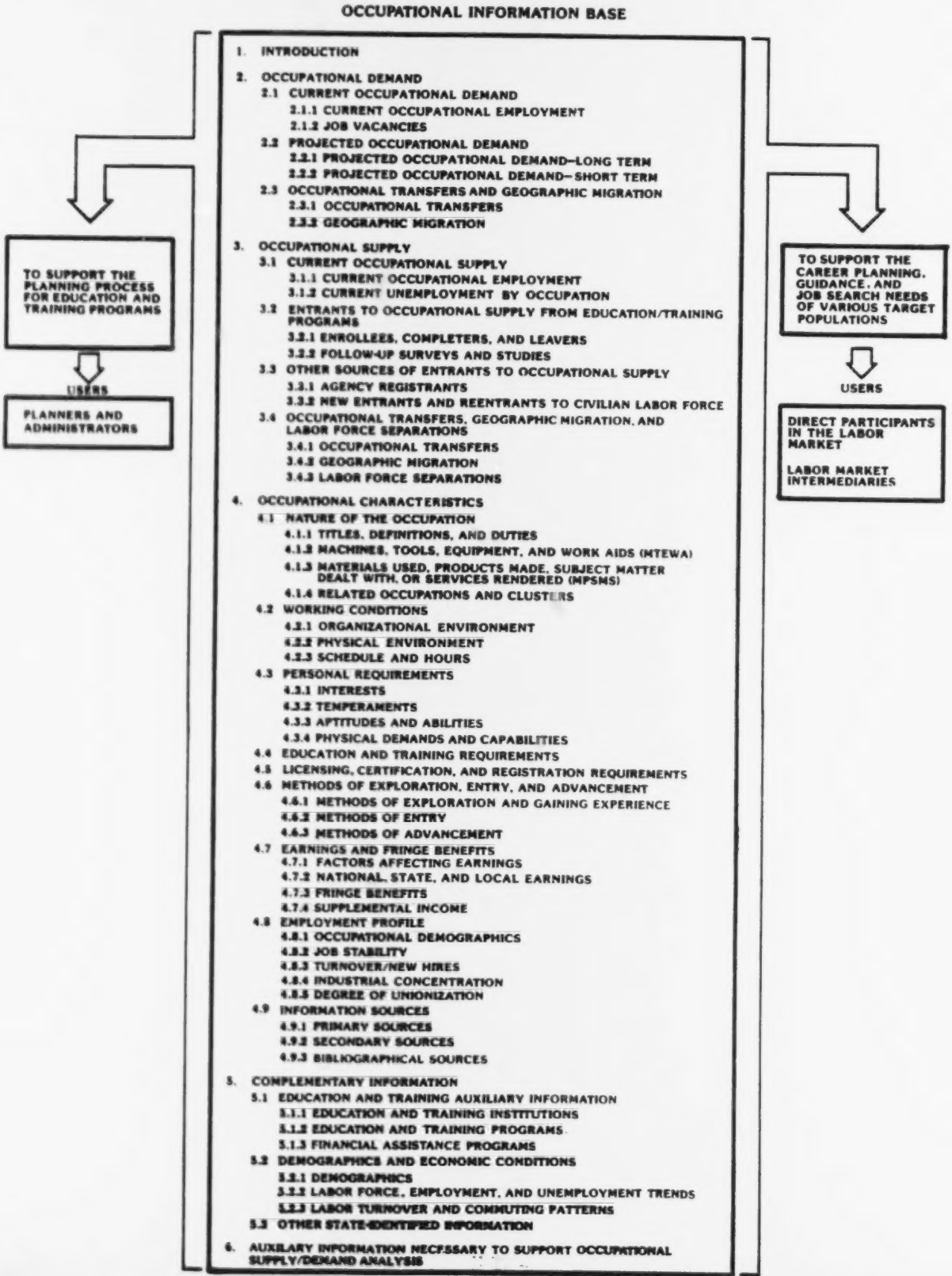
State	BAGs	Spec. Grants	TOTALS
Alabama	93,927		93,927
Alaska	81,211		81,211
American Samoa	80,139		80,139
Arizona	89,165		89,165
Arkansas	87,811		87,811
California	142,204		142,204
Colorado	88,315		88,315
Connecticut	87,358		87,358
Delaware	81,722		81,722
D.C.	81,436		81,436
Florida	108,551		108,551
Georgia	99,616		99,616
Guam	80,433		80,433
Hawaii	82,908		82,908
Idaho	83,288		83,288
Illinois	110,456	4,500	114,956
Indiana	97,459		97,459
Iowa	88,751	710,000	798,751
Kansas	86,447	21,587	108,034
Kentucky	92,913	26,290	119,203
Louisiana	95,127		95,127
Maine	83,892		83,892
Maryland	91,494		91,494
Massachusetts	94,981		94,981
Michigan	107,538		107,538
Minnesota	91,715	25,000	116,715
Mississippi	89,291	49,999	139,290
Missouri	94,849		94,849
Montana	82,588		82,588
Nebraska	84,625		84,625
Nevada	82,399	50,000	132,399
New Hampshire	82,807		82,807
New Jersey	97,174		97,174
New Mexico	84,945		84,945
New York	125,341		125,341
North Carolina	101,272	13,000	114,272
North Dakota	81,942	100,000	181,942
No. Mariana Islands	72,579		72,579
Ohio	112,020		112,020
Oklahoma	89,615		89,615
Oregon	87,671	10,000	97,671
Pennsylvania	114,213	45,000	159,213
Puerto Rico	92,631		92,631
Rhode Island	82,811		82,811
South Carolina	91,981		91,981
South Dakota	82,258		82,258
Tennessee	96,020	165,626	261,646
Texas	126,368	133,954	260,322
Utah	85,625		85,625
Vermont	81,804		81,804
Virgin Islands	80,368		80,368
Virginia	96,351		96,351
Washington	91,714	13,682	105,396
West Virginia	86,405	48,850	135,255
Wisconsin	94,360		94,360
Wyoming	81,371		81,371

MAJOR SOURCES of SOICC FUNDING: PY 1986

Source	No. of States	Amount	Percent of Total [1]
NOICC	56	$6,579,743	50.5
JTPA	17	1,506,252	11.6
PVEA	19	1,013,872	7.8
State Funds	10	1,300,453	10.0
Emp. Ser./ Wagner-Peyser	9	380,383	2.9
Economic Dev.	2	12,500	0.1
Voc. Rehab.	3	50,000	0.4
Other	18	2,185,371	16.8
TOTAL		$13,028,574	

[1] Because of rounding, percents do not total to 100.0.

OIS INFORMATION BASE AND THE TWO MAJOR USES OF OCCUPATIONAL INFORMATION


OCCUPATIONAL INFORMATION BASE
1. INTRODUCTION
2. OCCUPATIONAL DEMAND
2.1 CURRENT OCCUPATIONAL DEMAND
2.1.1 CURRENT OCCUPATIONAL EMPLOYMENT
2.1.2 JOB VACANCIES
2.2 PROJECTED OCCUPATIONAL DEMAND
2.2.1 PROJECTED OCCUPATIONAL DEMAND–LONG TERM
2.2.2 PROJECTED OCCUPATIONAL DEMAND–SHORT TERM
2.3 OCCUPATIONAL TRANSFERS AND GEOGRAPHIC MIGRATION
2.3.1 OCCUPATIONAL TRANSFERS
2.3.2 GEOGRAPHIC MIGRATION
3. OCCUPATIONAL SUPPLY
3.1 CURRENT OCCUPATIONAL SUPPLY
3.1.1 CURRENT OCCUPATIONAL EMPLOYMENT
3.1.2 CURRENT UNEMPLOYMENT BY OCCUPATION
3.2 ENTRANTS TO OCCUPATIONAL SUPPLY FROM EDUCATION/TRAINING PROGRAMS
3.2.1 ENROLLEES, COMPLETERS, AND LEAVERS
3.2.2 FOLLOW-UP SURVEYS AND STUDIES
3.3 OTHER SOURCES OF ENTRANTS TO OCCUPATIONAL SUPPLY
3.3.1 AGENCY REGISTRANTS
3.3.2 NEW ENTRANTS AND REENTRANTS TO CIVILIAN LABOR FORCE
3.4 OCCUPATIONAL TRANSFERS, GEOGRAPHIC MIGRATION, AND LABOR FORCE SEPARATIONS
3.4.1 OCCUPATIONAL TRANSFERS
3.4.2 GEOGRAPHIC MIGRATION
3.4.3 LABOR FORCE SEPARATIONS
4. OCCUPATIONAL CHARACTERISTICS
4.1 NATURE OF THE OCCUPATION
4.1.1 TITLES, DEFINITIONS, AND DUTIES
4.1.2 MACHINES, TOOLS, EQUIPMENT, AND WORK AIDS (MTEWA)
4.1.3 MATERIALS USED, PRODUCTS MADE, SUBJECT MATTER DEALT WITH, OR SERVICES RENDERED (MPSMS)
4.1.4 RELATED OCCUPATIONS AND CLUSTERS
4.2 WORKING CONDITIONS
4.2.1 ORGANIZATIONAL ENVIRONMENT
4.2.2 PHYSICAL ENVIRONMENT
4.2.3 SCHEDULE AND HOURS
4.3 PERSONAL REQUIREMENTS
4.3.1 INTERESTS
4.3.2 TEMPERAMENTS
4.3.3 APTITUDES AND ABILITIES
4.3.4 PHYSICAL DEMANDS AND CAPABILITIES
4.4 EDUCATION AND TRAINING REQUIREMENTS
4.5 LICENSING, CERTIFICATION, AND REGISTRATION REQUIREMENTS
4.6 METHODS OF EXPLORATION, ENTRY, AND ADVANCEMENT
4.6.1 METHODS OF EXPLORATION AND GAINING EXPERIENCE
4.6.2 METHODS OF ENTRY
4.6.3 METHODS OF ADVANCEMENT
4.7 EARNINGS AND FRINGE BENEFITS
4.7.1 FACTORS AFFECTING EARNINGS
4.7.2 NATIONAL, STATE, AND LOCAL EARNINGS
4.7.3 FRINGE BENEFITS
4.7.4 SUPPLEMENTAL INCOME
4.8 EMPLOYMENT PROFILE
4.8.1 OCCUPATIONAL DEMOGRAPHICS
4.8.2 JOB STABILITY
4.8.3 TURNOVER/NEW HIRES
4.8.4 INDUSTRIAL CONCENTRATION
4.8.5 DEGREE OF UNIONIZATION
4.9 INFORMATION SOURCES
4.9.1 PRIMARY SOURCES
4.9.2 SECONDARY SOURCES
4.9.3 BIBLIOGRAPHICAL SOURCES
5. COMPLEMENTARY INFORMATION
5.1 EDUCATION AND TRAINING AUXILIARY INFORMATION
5.1.1 EDUCATION AND TRAINING INSTITUTIONS
5.1.2 EDUCATION AND TRAINING PROGRAMS
5.1.3 FINANCIAL ASSISTANCE PROGRAMS
5.2 DEMOGRAPHICS AND ECONOMIC CONDITIONS
5.2.1 DEMOGRAPHICS
5.2.2 LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT TRENDS
5.2.3 LABOR TURNOVER AND COMMUTING PATTERNS
5.3 OTHER STATE-IDENTIFIED INFORMATION
6. AUXILARY INFORMATION NECESSARY TO SUPPORT OCCUPATIONAL SUPPLY/DEMAND ANALYSIS
TO SUPPORT THE PLANNING PROCESS FOR EDUCATION AND TRAINING PROGRAMS
USERS
PLANNERS AND ADMINISTRATORS
TO SUPPORT THE CAREER PLANNING, GUIDANCE, AND JOB SEARCH NEEDS OF VARIOUS TARGET POPULATIONS
USERS
DIRECT PARTICIPANTS IN THE LABOR MARKET
LABOR MARKET INTERMEDIARIES

OIS DELIVERY SYSTEMS FOR PROGRAM PLANNING, BY STATE

STATE	MICRO LATEST UPDATE	MAINFRAME LATEST UPDATE	REPORT LATEST UPDATE	OES BASE YEAR	OES TARGET YEAR	HIGHER ED INCLUDED	SUB-STATE DATA
ALABAMA			6/85	1982	1995		
ALASKA	6/1/87		6/1/87	1986	1991	YES	YES
AMERICAN SAMOA					1987		
ARIZONA	1986		1986	1986	1991	YES	YES
ARKANSAS			4/15/87	1982	1995		YES
CALIFORNIA			5/15/86	1983	1993		YES
COLORADO	1987		1986	1985	1990		YES
CONNECTICUT	5/87		5/87	1986	1995	YES	YES
DELAWARE	9/30/86	9/30/86	11/15/85	1986	1995	YES	
DIST. OF COLUMBIA			2/81	1980	1990		
FLORIDA		6/86	10/87	1982	1995		YES
GEORGIA	4/9/87			1985	1990	YES	
GUAM	2/87		10/85				
HAWAII	4/87		4/87	1983	1995	YES	YES
IDAHO	9/15/86			1982	1990		
ILLINOIS	6/30/87		6/30/87	1982	1995	YES	YES
INDIANA	3/31/87		3/31/87	1980	1990		YES
IOWA	5/87		5/87	1986	1990		YES
KANSAS	7/86		9/86	1982	1990		
KENTUCKY	2/9/87		5/87	1982	1990	YES	YES
LOUISIANA	4/20/87		4/30/87	1980	1990	YES	YES
MAINE		4/2/83		1984	1995	YES	YES
MARYLAND	8/26/86			1982	1990		YES
MASSACHUSETTS				1984	1995		YES
MICHIGAN	BEGIN 5/87	3/85	3/85	1985	1995		YES
MINNESOTA				1982	1990		
MISSISSIPPI	5/1/87			1984	1996		YES
MISSOURI	1/87		3/23/86	1984	1995	YES	YES
MONTANA	8/1/86		8/1/86	1984	1990	YES	
NEBRASKA	5/30/87		9/1/86	1983	1988	YES	YES
NEVADA	2/27/87		2/20/87	1985	1991	YES	YES
NEW HAMPSHIRE	1/10/87			1983	1995	YES	YES
NEW JERSEY	4/87		4/87	1984	1995	YES	YES
NEW MEXICO				1981	1990		YES
NEW YORK	7/86-1/87		7/86-1/87	1988	1990	YES	YES
NORTH CAROLINA	6/30/86		4/30/86	1985	1990		
NORTH DAKOTA	1/15/86		1/15/86	1982	1990		
NO. MARIANA							
OHIO		1/20/87	5/20/87	1985	1995	YES	YES
OKLAHOMA	11/86 TEST			1984	1990	YES	
OREGON	5/87	1/87	1/87	1984	1992	YES	YES
PENNSYLVANIA	1/87		3/87	1984	1995	YES	YES
PUERTO RICO			1986			YES	
RHODE ISLAND	4/87			1980	1990	YES	
SOUTH CAROLINA				1980	1990		YES
SOUTH DAKOTA	07/01/87			1985	1995	YES	
TENNESSEE	12/1/86			1984	1990		YES
TEXAS	4/ /87		4/ /87	1982	1990	YES	YES
UTAH	PY 1987	1/12/86	12/30/85	1986	1991	YES	YES
VERMONT			6/30/86	1984	1995		
VIRGIN ISLANDS						YES	
VIRGINIA			11/86	1984	1995	YES	YES
WASHINGTON	7/86		10/86	1985	1990	YES	YES
WEST VIRGINIA	4/85		7/85	1985	1996	YES	
WISCONSIN			1982,1986/7	1984	1995		YES
WYOMING	7/85		7/85	1985	1990	YES	YES

STATEWIDE, COMPUTER-BASED CAREER INFORMATION DELIVERY SYSTEMS
(as reported by SOICC's in June 1987)

	MEDIA USED TO DELIVER INFORMATION								NO. OF SITES
	SEARCH				DATA BASE				
ALABAMA	M				M				455
ALASKA	M	mc	ns		M			P	113
AMERICAN SAMOA			ns				f	P	13
ARIZONA	M	mc			M	mc			190
ARKANSAS		mc		P			f		724
COLORADO	M	mc		P	M			P	132
CONNECTICUT	M				M				108
DELAWARE	M				M				87
DISTRICT OF COLUMBIA	M		ns		M			P	23
FLORIDA	M	mc		P	M	mc	f	P	638
GEORGIA	M	mc	ns		M	mc		P	201
HAWAII	M		ns		M			P	119
IDAHO	M	mc	ns		M	mc		P	134
ILLINOIS	M	mc	ns	P	M	mc	f		307
INDIANA	M	mc			M	mc			350
IOWA	M	mc	ns		M	mc	f	P	546
KANSAS		mc				mc			257
KENTUCKY		mc				mc			265
LOUISIANA	M	mc			M	mc			170
MAINE	M	mc			M	mc			164
MARYLAND	M	mc		P	M		f		329
MICHIGAN	M	mc		P	M	mc	f		2330
MINNESOTA		mc				mc		P	273
MISSISSIPPI		mc				mc			40
MISSOURI		mc	ns	P		mc	f	P	1074
MONTANA	M	mc	ns		M			P	98
NEBRASKA		mc	ns			mc		P	244
NEW JERSEY	M				M				135
NEW MEXICO	M	mc			M	mc			49
NORTH CAROLINA		mc						P	427
NORTH DAKOTA		mc				mc			95
OHIO	M	mc			M	mc			615
OKLAHOMA		mc		P		mc	f	P	618
OREGON	M	mc	ns		M	mc		P	351
PENNSYLVANIA		mc				mc			75
PUERTO RICO		mc				mc			66
RHODE ISLAND		mc				mc			24
SOUTH CAROLINA	M	mc			M	mc			376
SOUTH DAKOTA		mc				mc			295
TENNESSEE		mc		P		mc	f	P	375
UTAH	M	mc		P	M	mc		P	217
VERMONT	M				M				40
VIRGINIA		mc		P			f		1095
WASHINGTON	M	mc	ns		M	mc	f	P	311
WISCONSIN		mc		P		mc		P	620
WYOMING	M	mc		P	M			P	57

KEY & NUMBER OF STATES

SEARCH DELIVERY MEDIA

M	= mainframe computer	28
mc	= microcomputer	38
ns	= needlesort	13
P	= paper	13

DATA BASE DELIVERY MEDIA

M	= mainframe computer	28
mc	= microcomputer	30
f	= microfiche	12
P	= paper	21

Notes: Career Information is available in virtually all States through a variety of public and commercial resources, including computer-based systems. Only the 46 States that have SOICC-recognized, computer-based CIDS are listed in the table. Of the 10 States not listed:

1) Two will start systems in 1987/88, with the assistance of a NOICC CIDS grant: Nevada and West Virginia.

2) In California and New York, several large computerized systems, both public and commercial are in operation, but the SOICC has not designated any as the statewide CIDS.

3) Six States did not have a computer-based statewide system in operation as of June, 1987: Guam, Massachusetts, New Hampshire, Northern Mariana Islands, Texas, and Virgin Islands.

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1985

SOICC Director's Guide,
1985

A Guide to Using the National Units of Analysis,
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1983

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1983

Information Preparation Guide for the Maine OIS,
1982

A Review of State Level Labor Supply/Demand Analysis for Program Planning and Career Decision Making: Technical Issues in Relating and Presenting Supply/Demand Data,
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1982

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1982

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1981

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Volume 2: Occupational Information Analysis,Presentation and Delivery,***
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1979

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1980

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1980

3. Status of Occupational Supply and Demand Information,*
1980

4. A Review of Employer Forecasting Methods and Data,*

5. The Status of the NOICC/SOICC Network, September 30, 1980*

6. The Status of the NOICC/SOICC Network, September 30, 1981*

7. The Status of the NOICC/SOICC Network, September 30, 1982*

8. An Introduction to Using an Occupational Information System,* 1983

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10. Status of Statewide Career Information Delivery Systems, September 1984*

11. Status of the NOICC/SOICC Network, June 30, 1985*

12. Status of the NOICC/SOICC Network, June 30, 1986*

*No longer available
**Available from National Governors' Association
***Available from U.S Government Printing Office

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1986

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1986 (6th edition)

Cracking the Labor Market for Human Resource Planning,**
1986

Improved Career Decision Making Through the Use of Labor Market Information: Trainer's Guide,
1985

Career Information in the Classroom: Workshop Guide for Infusing the Occupational Outlook Handbook,
1985

Micro-OIS dBASE III Conversion Manual,
1985

Using Labor Market and Occupational Information in Human Resource Program Planning*
1985

A Directory of Counselor Education Courses Covering Career, Occupational and Labor Market Information Concepts,
1984

OIS Microcomputer User's Guide,
1984

OIS Microcomputer Documentation,
1984

Occupational Employment Data in Agriculture,
1983

Occupational Area-Specific Staffing Information System (OASIS): Users Manual, Operations Manual, Systems Manual,
1982

Alternative Methods for Collecting Follow-Up Information About Secondary Vocational Education Students,*
1982

Analysis of State Experiences in Financing Statewide CIDS,*
1982

Career Information Delivery for Handicapped Individuals,
1981

Data Needs and Uses in the Context of an OIS: Review of Literature,
1981

Estimating Occupational Supply Information from Federal Reports: Issues and Concerns,
1981

Issues Related to Collection of Occupational Employment Data in Agriculture,
1981

Occupational Information and Vocational Education: A Concept Paper,
1981

Occupational Information Needs at the Federal Level,
1981

OIS and the Employment Security System: A Need and Resources Assessment,
1981

OIS and Vocational Rehabilitation: A Concept Paper,
1981

Role of an OIS in Career Guidance and Counseling,
1981

The Feasibility of Collecting Labor Market Supply Data from Existing Records,
1981

Occupational Information Needs for CETA Prime Sponsors,*
1981

Systematic Approach to Improving the Training Process in CIDS,*
1981

Occupational Information Needs at the State Level: An Empirical Study,*
1981

National Student Follow-Up Workshop: A Background Paper,*
1981

Continued Federal Role in Financing and Supporting Statewide CIDS,*
1981

BLS-Alternative Estimating Methods for Sub-State Area Occupational Employment,*
1981

Interfacing the SOC System with the OES System,*
1980

*No longer available
** Available from the National Governors' Association

MAJOR NOICC CONFERENCES AND TRAINING PROGRAMS

Industry/Occupational Projections Workshops

1987 San Antonio, Tex.

1986 Raleigh, N.C.

1986 Carson City, Nev.

National SOICC Conferences

1987 Portland, Ore.

1986 Portland, Maine

1985 Denver, Colo.

1984 Lexington, Ky.

1983 Seattle, Wash.

1982 Huntsville, Ala.

1981 Reno, Nev.

1980 Arlington, Va.

1979 Biloxi, Miss.

1978 Denver, Colo.

National OIS Technical Conferences

1986 Kansas City, Mo.

1984 St. Louis, Mo.

1983 St. Louis, Mo.

1982 Portland, Maine

National CIDS Conferences

1985 Atlanta, Ga.

1984 Charleston, S.C.

1983 St. Louis, Mo.

1981 CIDS Technology
Columbus, Ohio

1980 CIDS Management
San Antonio, Tex.

CIDS Marketing & Funding
3 Regional Meetings

CIDS Info. Development
New Orleans, La.

1979 Career Information for Handicapped Individuals
San Antonio, Tex.

Using LMI in Program Planning

1985 National Workshop
Miami, Fla.

1984 Using LMI in Human Resource Program Planning
Ventura, Cal.
Detroit, Mi.
Providence, R.I.
Washington, DC

1982 Regional Conferences with Office of Vocational and Adult Education (U.S. Department of Education)
San Diego, Cal.
Chicago, Ill.
Atlanta, Ga.

Other NOICC Conferences

1978-83	Spring Symposia for Federal Agencies (held annually for six years)
1978-81	National EIC Conferences (sponsored annually for three years with National Center for Educational Brokering)
1977	SOICC Organizational Workshops Atlanta, Ga. Kansas City, Mo. Seattle, Wash.

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NOICC ENABLING LEGISLATION

The National Occupational Information Coordinating Committee and the State Occupational Information Coordinating Committees were established by the Vocational Education Amendments of 1976.

Subsequent legislation reinforced and expanded the primary mission and objectives of the national and state committees, including the Career Education Incentive Act of 1977; the Youth Employment and Demonstration Projects Act of 1977; the Comprehensive Employment and Training Act Amendments of 1978; the Job Training Partnership Act of 1982; and the Carl D. Perkins Vocational Education Act of 1984.

JOB TRAINING PARTNERSHIP ACT OF 1982

NOICC shall "...give special attention to the labor market information needs of youth and adults, including activities such as...assisting and encouraging the development of state occupational information systems, including career information delivery systems...encouraging programs providing career information, counseling, and employment services for postsecondary youth....provide training and technical assistance...in the development, maintenance, and use of occupational supply and demand information systems...conduct research and demonstration projects designed to improve any aspect of occupational and career information systems...."

CARL D. PERKINS VOCATIONAL EDUCATION ACT OF 1984

NOICC shall "...provide funds, on an annual basis, to State Occupational Information Coordinating Committees and...improve coordination and communication among administrators and planners of programs authorized by the Act and by the Job Training Partnership Act, employment security agency administrators, research personnel, and personnel of employment and training planning and administering agencies...develop and implement...an occupational information system to meet the common occupational information needs of vocational education programs and employment and training programs at the national, state and local levels...conduct studies on the effects of technological change on new and existing occupational areas and the required changes in knowledge and job skills and assist State Occupational Information Coordinating Committees...(to) implement an occupational information system in the state...and use the occupational information system to implement a career information delivery system."